

CURRICULUM VITAE

**Dr. Sayan Biswas**  
**M. Pharm (JU), PhD (JU)**  
Post-Doctoral Research Associate  
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ACADEMIC QUALIFICATIONS

Qualification	Institution	University/board	Year	Result
Post-Doctoral Research Associate	Institute of Bioresources and Sustainable Development	Department of Biotechnology (DBT), Ministry of Science and Technology, Government of India	Jan 2021-Present	
<b>Working on:</b> Phyto pharmaceutical development from medicinal plant resources of North East India				
PhD.	Jadavpur University	Jadavpur University	2020	
<b>PhD thesis title: "Development and evaluation of herbosomes of some therapeutically potent phytomolecules"</b> under guidance of Prof. Pulok K Mukherjee, Professor, Department of Pharmaceutical Technology, Jadavpur University, Kolkata.				
M. Pharm (Pharmaceutical Chemistry)	Jadavpur University	Jadavpur University	2013	74.72% First division
<b>M. Pharm thesis title: "Development and evaluation of herbal adhesive bandage"</b> under guidance of Prof. Pulok K Mukherjee, Professor, Department of Pharmaceutical Technology, Jadavpur University, Kolkata.				
B. Pharm	BCDA college of Pharmacy and Technology	West Bengal University of Technology	2010	69.6 % First division
Class 12	North point Senior Secondary Boarding School	CBSE	2005	75.8% First division
Class 10	North Point Senior Secondary Boarding School	CBSE	2003	81.8% First division

### ACADEMIC ACHIEVEMENTS

Selected as doctoral fellow under RUSA 2.0 doctoral fellowship scheme by Jadavpur University, vide letter no: R-11/143/19 dated 25.02.19 during 2019-2020

Selected as Research assistant in Department of Biotechnology (DBT) sponsored project titled “Metabolomic study: tools for quality evaluation and validation of Medicinal plants used in Indian systems of medicine” by Jadavpur University, vide letter no: R-11/297/15, dated 24.07.15 during 2015-2019

Qualified National Institute of Pharmaceutical Education and Research Joint Entrance Exam (NIPER JEE) in 2011

Qualified Graduate Pharmacy Aptitude Test (GPAT, Equivalent to GATE Pharmacy) in 2011

### AWARDS

**Best poster presentation award in 18<sup>th</sup> International Congress of ISE & 5<sup>th</sup> International Congress of SFE-India (ISE-SFEC 2018)** entitled “Optimized *p* coumaric acid-phospholipid complex improves protection against UVA induced oxidative stress” at University of Dhaka, Bangladesh, January 13-15, 2018.

### WORK/TEACHING EXPERIENCE

Served as visiting faculty in Department of Pharmaceutical Technology, Jadavpur University during the session 2018-2019 (subjects taught: Pharmaceutical Chemistry-II (Analytical I), Pharmaceutical Chemistry-III (Organic II) and Medicinal Chemistry-IV).

Guided M. Pharm and B. Pharm students in handling laboratory equipment, project designing and implementation

Skilled scientific writer and experienced reviewer demonstrated by assisting my supervisor (Associate Editor of the Journal of Ethnopharmacology), in reviewing many scientific manuscripts and articles all throughout the PhD tenure.

Strong organizational skills revealed through being a member of organizing committee SFE-India (Society for Ethnopharmacology), Kolkata, India and playing an active role in organizing several conferences and science outreach events.

## CORE EXPERTISE

- ✓ Experience in handling various scientific databases such as science direct, scopus, pubmed, web of science, cochrane etc.
- ✓ Proficiency in using various reference management softwares such as Mendeley, endnote, Zotero etc.
- ✓ Scientific writing, scientific publication, grant writing, proofreading
- ✓ Project designing, handling of the financial aspects of the projects, auditing and reporting
- ✓ Proficient in writing and reviewing different SOPs, manuscript, poster, abstract, proceeding presentation
- ✓ Handling various sophisticated instruments including LC-QTOF-MS (Agilent), Analytical RP-HPLC (Waters), UFLC (Shimadzu), preparative HPLC (Shimadzu) HPTLC system (CAMAG), UV/Visible double beam Spectrophotometer (Cecil CE-7200), multimode microplate reader (spectramax M3i/M5), Atomic Absorption Spectrophotometer (Thermofisher scientific), Flash chromatography (Biotage), microwave extractor (CATALYST), programmable environmental testing chamber (REMI), Rotary Vacuum Evaporator (EYELA and BUCHI), Lyophilizer for freeze drying, Digital microscope (Dewinter) etc.
- ✓ Proficient in Software such as Design expert, Auto dock, Winnonlin, GraphPad, Compusyn, mass hunter, Empower etc.

## PUBLICATIONS

### **Book chapters: 2**

“Ayurveda: Evidence-Based Approach for Drug Development” 2019. Subhadip Banerjee, **Sayan Biswas**, Pulok K. Mukherjee in: Natural Medicines, CRC press, Boca Raton, DOI: 10.1201/9781315187853-31

“Enzyme inhibition assay for metabolic disorders-exploring leads from medicinal plants” 2020. Pulok K. Mukherjee, Ranjit K. Harwansh, Shiv Bahadur, Joydeb Chanda, **Sayan Biswas**, Subhadip Banerjee in: Animal Biotechnology : Models in Discovery and Translation, 2nd Edition, Ashish S. Verma and Anchal Singh (Eds), Elsevier Science, Netherlands. DOI: 10.1016/B978-0-12-811710-1.00033-1

**Conference proceedings: 2**

“Standardization of three different cultivars of *Lagenaria siceraria* (Molina) standl fruits using Cucurbitacin-E by RP-HPLC”. **Sayan Biswas**, Joydeb Chanda, Amrendra Tiwari, Pulok K Mukherjee published in International Journal of Pharmaceutical Sciences and Research (IJPSR) 2015, ISSN: 0975-8232, 41-43, (Impact factor-1.230), as scientific Proceeding of 20<sup>th</sup> Annual National Convention of APTI, India on “Strategic Approaches to Strengthen Academic and Industrial Collaboration”

“Identification of major chemical constituents in *Momordica charantia* using Liquid Chromatography-Mass Spectrometry and its lipase inhibitory activity”. Joydeb Chanda, Pulok Kumar Mukherjee, **Sayan Biswas**, Suvodip Banerjee, Amit Kar, Faraz Rashid, Dipanakar Malakar, Manoj Pillai published in Journal of The American Society for Mass Spectrometry 2017. 28, 45, Springer Nature (Impact factor-3.255) as scientific proceeding of 65<sup>th</sup> ASMS Conference on Mass Spectrometry and Allied Topics.

**Publication in peer reviewed referred Journals:**

**I. International: 17**

SL. No.	Names of All Authors	Title	Name of the Journal, Volume, Year, Page Number
1.	<b>Sayan Biswas</b> , Amit Kar, Joydeb Chanda, Nanaocha Sharma, Pardeep Bharadwaj, Pallab Kanti Halder, Pulok Kumar Mukherjee	RP-UFLC-PDA for simultaneous estimation of ayapanin and umbelliferone in <i>Ayapana triplinervis</i> vahl	Biomedical Chromatography, 2022, DOI: <a href="https://doi.org/10.1002/bmc.5328">https://doi.org/10.1002/bmc.5328</a>
2.	<b>Sayan Biswas</b> , Amit Kar, Nanaocha Sharma, Pallab K. Halder & Pulok K. Mukherjee	Synergistic effect of ursolic acid and piperine in CCl <sub>4</sub> induced hepatotoxicity	Annals of Medicine, 2021 53(1), 2009-2017
3.	<b>Sayan Biswas</b> , Pulok K. Mukherjee, Amit Kar, Subhadip Bannerjee, Shibu Narayan Jana, Pallab Kanti Halder, Nanaocha Sharma	Enhanced permeability and photoprotective potential of optimized <i>p</i> -coumaric acid-phospholipid complex loaded gel against UVA mediated oxidative	Journal of Photochemistry and Photobiology. B, Biology, 2021 221:112246

		stress	
4.	Pradip Debnath, Bhaskar Das, <b>Sayan Biswas</b> , Amit Kar, Pulok K. Mukherjee	Quality evaluation and quantification of cucurbitacin E in different cultivars of <i>Cucumis sativus</i> L. fruit by a validated high-performance thin-layer chromatography method	Journal of Planar Chromatography-Modern TLC. 2021. 34, 139-146
5.	Seha Singha, <b>Sayan Biswas</b> , Barun Dasgupta, Amit Kar, Pulok K. Mukherjee	Standardization of some plants of the Cucurbitaceae family by a validated high-performance thin-layer chromatography method	Journal of Planar Chromatography-Modern TLC. 2020. 33, 463-472
6.	Pulok K Mukherjee, Subhadip Banerjee, <b>Sayan Biswas</b> , Bhaskar Das, Amit Kar, C K Katiyar	<i>Withania somnifera</i> (L.) Dunal - Modern perspectives of an ancient Rasayana from Ayurveda	Journal of Ethnopharmacology, 2020, DOI: 10.1016/j.jep.2020.113157
7.	Sayan Biswas , Pulok K. Mukherjee , Amit Kar , Subhadip Bannerjee , Rawiwan Charoensub, Thidarat Duangyod	Optimized piperine-phospholipid complex with enhanced bioavailability and hepatoprotective activity	Pharmaceutical Development and Technology, 2021. 26(1): 1-12
8.	Akanksha Sharma, Chandra Kant Katiyar, Subhadip Banerjee, Joydeb Chanda, Amit Kar, <b>Sayan Biswas</b> , Pulok K Mukherjee	RP-HPLC and HPTLC methods for analysis of selected herbs used as complexion promoters in Ayurveda and Unani systems of medicine	Journal of AOAC International. 2020. 103(3): 692-698
9.	<b>Sayan Biswas</b> , Ranjit K. Harwansh, Amit Kar and Pulok K. Mukherjee	Validated High-Performance Thin-Layer Chromatographic method for the simultaneous determination of quercetin, rutin, and gallic acid in <i>Amaranthus tricolor</i> L	Journal of Planar Chromatography-Modern TLC. 2019. 32(2):121-126

10.	<b>Sayan Biswas</b> and Pulok Kumar Mukherjee	Validated High-Performance Thin-Layer Chromatographic-densitometric method for the isolation and standardization of ayapanin in <i>Ayapana triplinervis</i>	Journal of Planar Chromatography-Modern TLC. 2019. 32(1) 1-6.
11.	<b>Sayan Biswas</b> , Pulok K Mukherjee, Ranjit K Harwansh, Subhadip Bannerjee, Pritorthi Bhattacharjee	Enhanced bioavailability and hepatoprotectivity of optimized ursolic acid-phospholipid complex	Drug Development and Industrial Pharmacy. 2019. 45(6):1-45
12.	Joydeb Chanda, Pulok K Mukherjee, Rajarshi Biswas, <b>Sayan Biswas</b> , Amrendra Kumar Tiwari, Ashish Pargaonkar	UPLC-QTOF-MS analysis of a carbonic anhydrase-inhibiting extract and fractions of <i>Luffa acutangula</i> (L.) Roxb (ridge gourd)	Phytochemical Analysis. 2019. 30(2):148-155.
13.	Pulok K., Mukherjee, Rajarshi Biswas, Akanksha Sharma, Subhodip Banerjee, <b>Sayan Biswas</b> , C.K. Katiyar	Validation of medicinal herbs for anti-tyrosinase potential	Journal of Herbal Medicine. 2018.14, 1-16
14.	Ranjit K Harwansh, Pulok K. Mukherjee, <b>Sayan Biswas</b>	Nanoemulsion as a novel carrier system for improvement of betulinic acid oral bioavailability and hepatoprotective activity	Journal of Molecular Liquids. 2017. 237, 361-371
15.	Pulok K Mukherjee, Ranjit K Harwansh, Shiv Bahadur, Subhadip Banerjee, Amit Kar, Joydeb Chanda, <b>Sayan Biswas</b> , Sk Milan Ahmmed, C K Katiyar	Development of Ayurveda – Tradition to trend	Journal of Ethnopharmacology, 2017, 197:10-24.
16.	Pulok K. Mukherjee, Shiv Bahadur, Ranjit	Paradigm shift in natural product research:	Phytochemistry Reviews. 2017. 16, 803-826

	K. Harwansh, <b>Sayan Biswas</b> , Subhadip Banerjee	traditional medicine inspired approaches	
17.	Rajarshi Biswas, Pulok K Mukherjee , Amit Kar, Shiv Bahadur, Ranjit K Harwansh, <b>Sayan Biswas</b> , Naif Abdullah Al-Dhabi, V Duraipandiyam	Evaluation of Ubtan—A traditional Indian skin care formulation	Journal of Ethnopharmacology. 2016. 192, 283-291.

## II. National: 2

Joydeb Chanda, **Sayan Biswas**, Amit Kar, Pulok K. Mukherjee. Determination of cucurbitacin E in some selected herbs of ayurvedic importance through RP-HPLC. *Journal of Ayurveda and integrative medicine*, 2019, S0975-9476(18)30523-0.

Pulok K. Mukherjee, Ranjit K. Harwansh, Shiv Bahadur, **Sayan Biswas**, Lalitha N. Kuchibhatla, Sarada D. Tetali and A. S. Raghavendra. Metabolomics of medicinal plants – a versatile tool for standardization of herbal products and quality evaluation of Ayurvedic formulations. *Current Science*, 2016, 111, 1624-1630

## Conference abstracts: 21

Phytochemical analysis, HPTLC based standardization and in-vitro antioxidant activity of *Tinospora cordifolia* (Willd.) Miers ex Hook. F. & Thoms. **Sayan Biswas**, Pulok K Mukherjee, Amit Kar, Sushil K Chaudhary, Nanaocha Sharma. 8<sup>th</sup> Convention of Society for Ethnopharmacology, India on “Ethnopharmacology for wellness: Tradition to Translation” at CSIR-IICB, Salt Lake Campus, Kolkata, India, December 10 , 2021.

HPTLC based chemoprofiling and physicochemical parameters of bamboo biosilica. **Sayan Biswas**, Kumaraswamy Jeyaram, Pulok K Mukherjee, Amit Kar, Sushil K Chaudhary, Nanaocha Sharma. 8<sup>th</sup> International Congress of Society for Ethnopharmacology (SFEC 2021) on “Ethnopharmacology and Medicinal Plants – An approach towards drug development” at Poona College of Pharmacy, Bharati Vidyapeeth, Pune, MH, India, August 27-29, 2021

Enhanced permeability and photoprotective potential of caffeic acid-phospholipid complex loaded gel against UVA induced oxidative stress. **Sayan Biswas**, Subhadip Banerjee, Shibu Narayan Jana, Pulok K Mukherjee. 7<sup>th</sup> International congress Society of Ethnopharmacology, India (SFEC 2020) on “Ethnopharmacology in development of scientifically validated quality products from Medicinal plants and Regulatory aspects” Jamia Hamdard, New Delhi, India, February 15-17, 2020.



Geochemoprofiling and network pharmacology analysis of Ashwagandha (*Withania somnifera*)- a well-known Rasayana from Ayurveda. Subhadip Banerjee, **Sayan Biswas**, Amit Kar, Bhaskar Das, Pulok K Mukherjee. 7<sup>th</sup> International congress Society of Ethnopharmacology, India (SFEC 2020) on “Ethnopharmacology in development of scientifically validated quality products from Medicinal plants and Regulatory aspects” Jamia Hamdard, New Delhi, India, February 15-17, 2020.

*In-vitro* alpha glucosidase inhibitory activity of different cultivars of *Cucumis sativus*. Pradip Debnath, **Sayan Biswas**, Subhadip Banerjee, Pulok K Mukherjee. 7<sup>th</sup> International congress Society of Ethnopharmacology, India (SFEC 2020) on “Ethnopharmacology in development of scientifically validated quality products from Medicinal plants and Regulatory aspects” Jamia Hamdard, New Delhi, India, February 15-17, 2020.

Quantification and standardization of piperine in *Piper nigrum* extract using HPLC and HPTLC method. Shibu Narayan Jana, Subhadip Banerjee, **Sayan Biswas**, Joydeb Chanda, Pulok K Mukherjee. International workshop on application of NIR spectroscopy in food and agriculture, Science city auditorium, Kolkata, organized by Jadavpur University, Kolkata, in association with Japan Council Of Near Infrared Spectroscopy, Japan and Tea research association, India , India, March 23, 2019

Development of HPLC, HPTLC method for chemical standardization and LC-MS/MS QTOF metabolite profiling of *Andrographis paniculata*. Subhadip Banerjee, **Sayan Biswas**, Joydeb Chanda, Shibu Narayan Jana, Pulok K Mukherjee. International workshop on application of NIR spectroscopy in food and agriculture, Science city auditorium, Kolkata, organized by Jadavpur University, Kolkata, in association with Japan Council Of Near Infrared Spectroscopy, Japan and Tea research association, India , India, March 23, 2019

*In-vitro* alpha amylase enzyme inhibition potential of some food plants belongs to cucurbitaceae family. Seha Singha, Barun Dasgupta, **Sayan Biswas**, Pulok K Mukherjee. “6<sup>th</sup> International Congress of Society for Ethnopharmacology (SFEC 2019) on [Medicinal plants and Traditional Medicine: Ethnopharmacology at the interface of Local and Global needs]” at Manipal Academy of Higher Education, Manipal, India, February 08-10, 2019.

Quantification and standardization of andrographolide in *Andrographis paniculata* extract using HPLC, HPTLC and NIRS method. Shibu Narayan Jana, Subhadip Banerjee, **Sayan Biswas**, Dilip Singh, Rajib Bandopadhyay, Pulok K Mukherjee. “6<sup>th</sup> International Congress of Society for Ethnopharmacology (SFEC 2019) on [Medicinal plants and Traditional Medicine: Ethnopharmacology at the interface of Local and Global needs]” at Manipal Academy of Higher Education, Manipal, India, February 08-10, 2019.

HPTLC standardization of cucurbitacin E in different varieties of cucumber (*Cucumis sativus*) fruit. Pradip Debnath, **Sayan Biswas**, Pulok K Mukherjee. “6<sup>th</sup> International Congress of Society for Ethnopharmacology (SFEC 2019) on [Medicinal plants and Traditional Medicine: Ethnopharmacology at the interface of Local and Global needs]” at Manipal Academy of Higher Education, Manipal, India, February 08-10, 2019.



Optimized *p* coumaric acid-phospholipid complex improves protection against UVA induced oxidative stress. **Sayan Biswas**, Pulok K Mukherjee, Ranjit K Harwansh, Prasanta K Maitra. “18<sup>th</sup> International Congress of ISE & 5<sup>th</sup> International Congress of SFE-India (ISE-SFEC 2018)” at University of Dhaka, Bangladesh, January 13-15, 2018.

Investigating herb-drug interactions-The effects of *Swertia chirata* extract on the pharmacokinetics of pioglitazone in rats. Shiv Bahadur, Sayan Biswas, Amit Kar, Pulok K Mukherjee. “18<sup>th</sup> International Congress of ISE & 5<sup>th</sup> International Congress of SFE-India (ISE-SFEC 2018)” at University of Dhaka, Bangladesh, January 13-15, 2018.

LC-MS based metabolomics analysis of two edible *Momordica* species. **Sayan Biswas**, Amit Kar, Debayan Goswami, Pulok K Mukherjee. 4<sup>th</sup> Convention of SFE- India, and National Seminar on “Ashwagandha” and Conclave on local health tradition at Jadavpur University, Kolkata, India, September 9-10, 2017.

Piperine phospholipid complex enhances the bioavailability of piperine and increases the antioxidant potential. **Sayan Biswas**, Ranjit K Harwansh, Bhaksar Das, Subhadip Banerjee, Amit Kar, Debayan Goswami, R Logesh, Pritorthee Bhattacharejee, Prasanta Kumar Maitra, Pulok K Mukherjee. “4<sup>th</sup> International Congress of the Society for Ethnopharmacology, India (SFEC-2017), on [Healthcare in 21st century: Prospectives of Ethnopharmacology & Medicinal Plant Research]” at Uka Tarsadia University, Surat, India, February 23-25, 2017.

Herb-drug interaction of *Momordica charantia* extract on the pharmacokinetics of pioglitazone in streptozotocin induced diabetic rats. Shiv Bahadur, Ranjit K Harwansh, **Sayan Biswas**, Amit Kar, Pulok K Mukherjee. “4<sup>th</sup> International Congress of the Society for Ethnopharmacology, India (SFEC-2017), on [Healthcare in 21st century: Prospectives of Ethnopharmacology & Medicinal Plant Research]” at Uka Tarsadia University, Surat, India, February 23-25, 2017.

Hepatoprotective activity of *Andrographis paniculata*: a network pharmacology approach. **Sayan Biswas**, Akansha Sharma, Subhadip Banerjee, Joydeb Chanda, Logesh Rajan, Pritorthi Bhattacharya, Amit Kar, Debayan Goswami, Pulok K Mukherjee. “3<sup>rd</sup> Convention of SFE- India, and National Seminar on [Analytical techniques for drug discovery & development form natural products]” at Jadavpur University, Kolkata, India, September 24, 2016.

Development of genistein loaded nanoemulsion based nano-gel for enhancement of therapeutic efficacy and bioavailability through transdermal delivery. Ranjit K Harwansh, Shiv Bahadur, Sayan Biswas, Pulok K Mukherjee. “3<sup>rd</sup> Convention of SFE- India, and National Seminar on [Analytical techniques for drug discovery & development form natural products]” at Jadavpur University, Kolkata, India, September 24, 2016.

RP-HPLC and HPTLC standardization and in-vitro pancreatic lipase inhibitory activity of some food plants. **Sayan Biswas**, Joydeb Chanda, Amrendra Tiwari, Pulok K Mukherjee. “3<sup>rd</sup> International Congress of the Society for Ethnopharmacology (SFEC 2016) on [Ethnopharmacology and Evaluation of Medicinal Plants-Global Perspectives]” at Pt. Ravishankar Shukla University, Raipur, Chhattisgarh, India, February 19-21, 2016.

RP-HPLC standardization and *in vitro* pancreatic lipase inhibitory activity of *Cucumis sativus* L. **Sayan Biswas**, Joydeb Chanda, Amrendra Tiwari, Pulok K. Mukherjee. “International Conference on Promotion, Prevention and Pacification: Ayurvedic Landscape” at science city auditorium, Kolkata, February 9-11, 2016.

RP-HPLC standardization and in-vitro pancreatic lipase inhibitory activity of some food plants of cucurbitaceaea family. **Sayan Biswas**, Joydeb Chanda, Amrendra Tiwari, Pulok K Mukherjee. “2<sup>nd</sup> Convention of SFE-India, and National Seminar on [Integrated Approaches for Promotion and Development of Herbal Medicine]” at Jadavpur University, Kolkata, India, December 05-06, 2015.

Evaluation of wound healing activity of *Ayapana triplinervis* vahl leaf extracts *in-vivo*. **Sayan Biswas**, Pulok Kumar Mukherjee, Rajarshi Biswas, Sk Milan Ahmmed, Pallab Kanti Halder. “1<sup>st</sup> Convention of SFE-India and National Seminar on “Opportunities in Medicinal Plant Research” at Jadavpur University, Kolkata, India, November 29-30, 2014.

#### CONFERENCE/WORKSHOP/SEMINAR/TRAINING

National Symposium on Promotion and development of Indian medicinal plants with special reference- Brahmi (*Bacopa monerii*) organized by School of Natural Product Studies, Jadavpur University, Kolkata, in association with the Society of Ethnopharmacology, September 7-8, 2018.

18<sup>th</sup> International congress of International Society for Ethnopharmacology (ISE) and 5<sup>th</sup> International congress of Society for Ethnopharmacology (SFE INDIA) on Ethnopharmacology and Drug Development: Innovation meets tradition at University of Dhaka, Bangladesh during January 13-15, 2018.

National Seminar on “Ashwagandha” and Conclave on local health tradition organized by School of Natural Product Studies, Jadavpur University, Kolkata, in association with the Society of Ethnopharmacology, September 9-10, 2017.

4<sup>th</sup> International Congress of the Society for Ethnopharmacology, India (SFEC-2017), Surat, on “Healthcare in 21st century: Prospectives of Ethnopharmacology & Medicinal Plant Research” being organized by Uka Tarsadia University, Bardoli, Surat, Gujarat, India during February 23-25, 2017

3<sup>rd</sup> Convention of SFE – INDIA, and the National Seminar [2016] on “Analytical techniques for drug discovery & development form natural products” was organized by School of Natural Product Studies, Jadavpur University, Kolkata, in association with the Society of Ethnopharmacology, Kolkata, India, and September 24, 2016.

3<sup>rd</sup> Convention of SFE-India, and the National Seminar [2016] on “Analytical techniques for drug discovery & development form natural products” was organized by School of Natural

Product Studies, Jadavpur University, Kolkata, in association with the Society of Ethnopharmacology. Kolkata, India, September 24, 2016.

3<sup>rd</sup> International Congress of the Society for Ethnopharmacology (SFEC 2016), Raipur on "Ethnopharmacology and Evaluation of Medicinal Plants- Global Perspectives." being organized by National Centre for Natural Resources (NCNR), Pt. Ravishankar Shukla University, Raipur, Chhattisgarh, India during February 19-21, 2016.

2<sup>nd</sup> Convention of SFE–India, and the National Seminar [2015] on “Integrated Approaches for Promotion and Development of Herbal Medicine” was organized by School of Natural Product Studies, Jadavpur University, Kolkata, in association with the Society of Ethnopharmacology Kolkata, India, from December 05-06, 2015.

1<sup>st</sup> Convention of SFE - INDIA and the National Seminar [2014] on “Opportunities in Medicinal Plant Research” was organized by School of Natural Product Studies, Jadavpur University, Kolkata, in association with the Society of Ethnopharmacology. Kolkata, India, from November 29.30, 2014.

12<sup>th</sup> congress of the International Society for Ethnopharmacology [ISE-2012] on Traditional Medicines and Globalization–The Future of Ancient Systems of Medicine Kolkata, India from February 17-19, 2012.

Participated in International workshop on application of NIR spectroscopy in food and agriculture, Science city auditorium, Kolkata, organized by Jadavpur University, Kolkata, in association with Japan Council Of Near Infrared Spectroscopy, Japan and Tea research association, India , India, March 23, 2019

Received training on “LC-MS analysis and data interpretation” under human resource development programme conducted by CSIR-Central Drug Research Institute Sector 10, Jankipuram Extension, Sitapur Road, Lucknow-226031, Uttar Pradesh, India from 31.07.2017 to 04.08.2017

#### OTHER CERTIFICATIONS

Successfully completed “Swift India” course from National Institute of Information Technology (NIIT) covering “MS Word, MS Excel, MS Powerpoint and MS Access”.

Certified painter (Chitra Visharad- equivalent to graduate qualification in painting) from Pracheen Kala Kendra, Sector 35-B, Chandigarh-160022 (India).

### PERSONAL DETAILS

Name : Sayan Biswas  
Father's Name : Shri Swapan Kumar Biswas  
Mother's Name : Smt. Alaka Biswas  
Date of Birth : 21/11/86  
Nationality : Indian.  
Sex : Male.  
Marital Status : Single  
Languages known : English, Hindi, Bengali  
Hobbies : Playing football, cricket.  
Co-curricular activities: Selected as school captain. Actively participated in art, quiz and sports in school and college

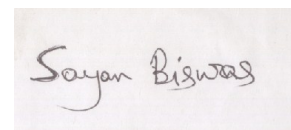
### REFERENCES

Prof. Pulok K. Mukherjee  
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Kolkata - 700032, India

I hereby declare that all the information furnished above is correct to the best of my knowledge and belief.



Place: Kolkata  
Date: 07.06.22

\_\_\_\_\_  
(Sayan Biswas)